

REMARKS

Examiner J. Maldonado is thanked for the thorough examination and search of the subject Patent Application. Claims 1, 8, and 15 have been amended.

All Claims are believed to be in condition for Allowance, and that is so requested. It is requested that should the Claims not be found allowable, that the amendment be entered for purposes of Appeal.

Reconsideration of the rejection under 35 U.S.C. 103 of Claims 1-21 as being unpatentable Mouroux in view of Erhardt et al and Ishida is requested in view of Amended Claims 1, 8, and 15 and in accordance with the following remarks.

It is agreed that Mouroux teaches a method of forming C40 and then C54 titanium silicide, including depositing titanium directly over the silicon regions as shown in Fig. 9. However, Mouroux requires the presence of a refractory metal such as Mo to form the C40 phase. This can be in the form of a refractory metal layer underlying the titanium, refractory metal implanted into the silicon regions, or an alloy of a refractory metal with the titanium. The examiner says that the alternative of implanting the refractory metal into the titanium meets the limitation of depositing the titanium directly over the regions to be silicided.

Applicants' detailed Claimed invention does not use a refractory metal in forming the C40 phase  $TiSi_2$ . It is the laser annealing that forms the C40 phase in Applicants' claimed invention. The Claims have been amended to make it clear that it is the laser annealing that

transforms the titanium to C40 TiSi<sub>2</sub>. This is taught on the top of page 7 of the Specification.

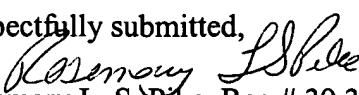
Laser annealing is not taught or suggested by Mouroux since Mouroux requires the presence of a refractory metal to form the C40 phase TiSi<sub>2</sub>. Ishida teaches laser annealing to form C49 phase TiSi<sub>2</sub> (col. 4, lines 5-18). Mouroux teaches forming C54 TiSi<sub>2</sub> by first forming a C40 phase silicide layer incorporating a refractory metal (see, for example, the summary on page 40).

There would be no motivation to use the laser annealing of Ishida in Mouroux even though Erhardt et al teach laser annealing as an alternative to RTA or furnace annealing. The laser annealing of Ishida forms phase C49 silicide. Mouroux forms phase C40 silicide by using an additional refractory metal. Neither reference has an understanding of the possibility of forming phase C40 silicide using laser annealing without the presence of an additional refractory metal. Thus, it is not agreed that Applicants' claimed invention is obvious in view of the combination of references.

Reconsideration of the rejection under 35 U.S.C. 103 of Claims 1-21 as being unpatentable Mouroux in view of Erhardt et al and Ishida is requested in view of Amended Claims 1, 8, and 15 and in accordance with the remarks above.

Allowance of all Claims is requested.

It is requested that should Examiner Maldonado not find that the Claims are now Allowable that the Examiner call the undersigned at 765 4530866 to overcome any problems preventing allowance.

Respectfully submitted,  
  
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